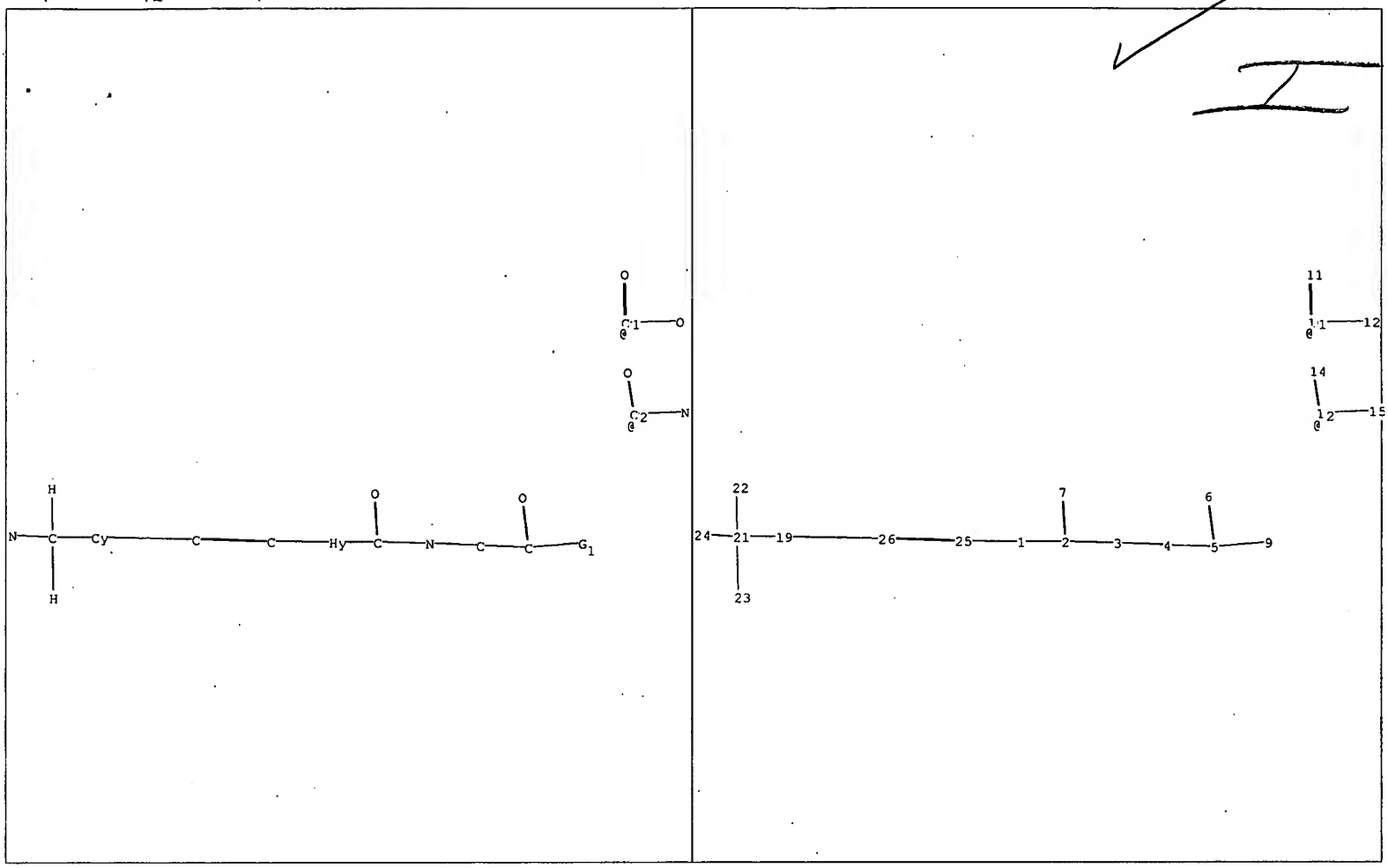
EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L7	28	pyridine-3-carboxamide near20 phenyl	US-PGPUB; USPAT	OR	OFF	2007/01/07 19:38
L8	66	pyridine-$-carboxamide near20 phenyl	US-PGPUB; USPAT	OR	OFF	2007/01/07 19:33
L9	38	l8 not l7	US-PGPUB; USPAT	OR	OFF	2007/01/07 19:35
L10	453	nicotinamide near20 phenyl	US-PGPUB; USPAT	OR	OFF	2007/01/07 19:39

C:\STNEXP\Queries\10690400-3.str



chain nodes :
1 2 3 4 5 6 7 9 10 11 12 13 14 19 21 22 23 25 26
ring/chain nodes :
15 24
chain bonds :
1-2 1-25 2-3 2-7 3-4 4-5 5-6 5-9 10-11 10-12 13-14 13-15 19-21 19-26 21-22
21-23 21-24 25-26
exact/norm bonds :
1-2 1-25 2-3 2-7 3-4 5-6 5-9 10-11 10-12 13-14 13-15 19-21 19-26 21-24
exact bonds :
4-5 21-22 21-23 25-26

G1:H,[*1],[*2]

Match level :
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 9:CLASS 10:CLASS 11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:Atom 21:CLASS 22:CLASS 23:CLASS 24:CLASS
25:CLASS 26:CLASS
Generic attributes :
1:
Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic
19:
Saturation : Unsaturated
Number of Carbon Atoms : less than 7

Type of Ring System : Monocyclic

Element Count :

Node 1: Limited

N,N1

O,O0

S,S0

Node 19: Limited

N,N0-1

O,O0

S,S0

11/291216

```
$%^STN;HighlightOn=;HighlightOff=;Version Version = STN Express 8.01a;
=> s l1
SAMPLE SEARCH INITIATED 23:54:24 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   107473 TO ITERATE

  1.9% PROCESSED     2000 ITERATIONS                                 2 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **INCOMPLETE**
                        BATCH   **INCOMPLETE**
PROJECTED ITERATIONS:      2130029 TO  2168891
PROJECTED ANSWERS:            1527 TO     2771

L2             2 SEA SSS SAM L1

=>
Uploading C:\STNEXP\Queries\10690400-1.str
```

```
chain nodes :
1  2  3  4  5  6  7  9  10  11  12  20  21  22  23  24  25
ring/chain nodes :
26
chain bonds :
1-2  1-9  2-3  2-7  3-4  4-5  5-6  5-20  9-10  10-11  11-12  21-22  21-23  24-25
24-26
exact/norm bonds :
1-2  1-9  2-3  2-7  3-4  5-6  5-20  9-10  10-11  11-12  21-22  21-23  24-25  24-26
exact bonds :
4-5


G1:H,[*1],[*2]

Match level :
1:Atom  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:CLASS  9:CLASS  10:CLASS
11:CLASS  12:Atom  20:CLASS  21:CLASS  22:CLASS  23:CLASS  24:CLASS  25:CLASS
26:CLASS
Generic attributes :
1:
Saturation              : Unsaturated
Number of Carbon Atoms  : less than 7
Type of Ring System     : Monocyclic
12:
Saturation              : Unsaturated

Element Count :
Node 1: Limited
```

11/291216

N,N1
O,O0
S,S0

Node 12: Limited
N,N0-2
O,O0
S,S0

L3 STRUCTURE UPLOADED

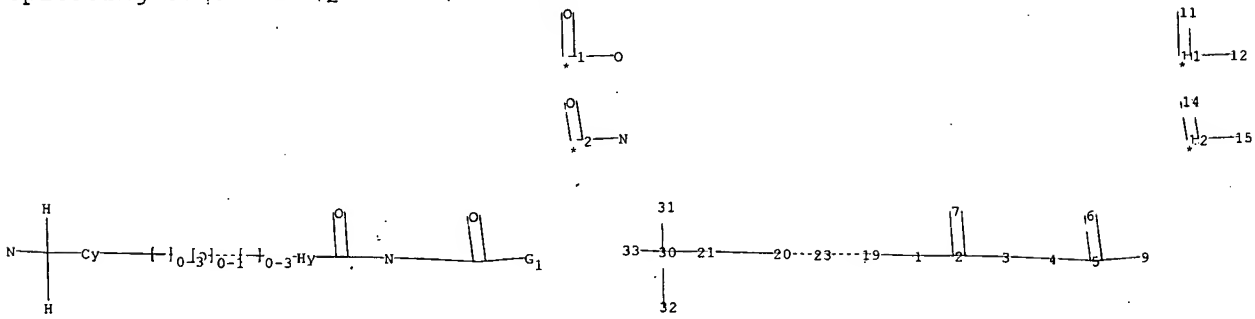
=> s l3
SAMPLE SEARCH INITIATED 23:58:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 107473 TO ITERATE

1.9% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 2130029 TO 2168891
PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L3

=>
Uploading C:\STNEXP\Queries\10690400-2.str



chain nodes :
1 2 3 4 5 6 7 9 10 11 12 13 14 19 20 21 23 30 31 32
ring/chain nodes :
15 33
chain bonds :
1-2 1-19 2-3 2-7 3-4 4-5 5-6 5-9 10-11 10-12 13-14 13-15 19-23 20-21 20-23 21-30 30-31 30-32 30-33
exact/norm bonds :
1-2 1-19 2-3 2-7 3-4 5-6 5-9 10-11 10-12 13-14 13-15 19-23 20-21 20-23 21-30 30-33
exact bonds :
4-5 30-31 30-32

11/291216

G1:H,[*1],[*2]

Match level :
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:Atom
23:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS
Generic attributes :
1:
Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic
21:
Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

Element Count :
Node 1: Limited
N,N1
O,O0
S,S0

Node 21: Limited
N,N0-1
O,O0
S,S0

L5 STRUCTURE UPLOADED

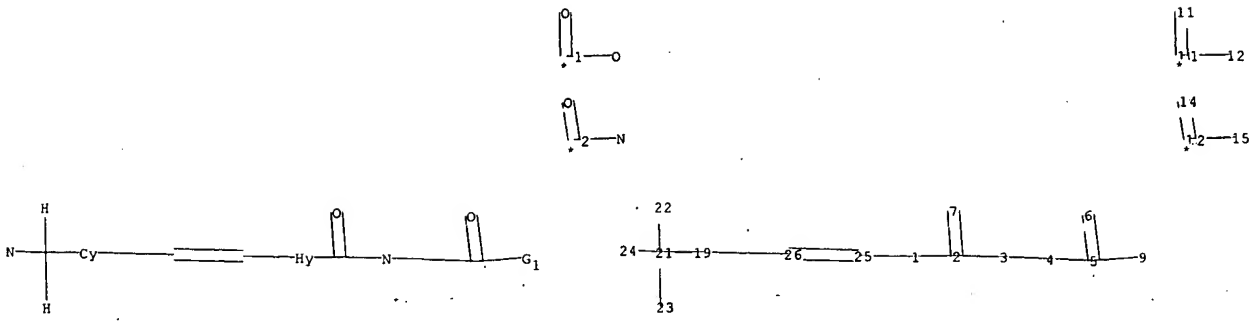
=> s l5
SAMPLE SEARCH INITIATED 00:06:58 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 97389 TO ITERATE

2.1% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 1929261 TO 1966299
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=>
Uploading C:\STNEXP\Queries\10690400-3.str



chain nodes :
1 2 3 4 5 6 7 9 10 11 12 13 14 19 21 22 23 25 26
ring/chain nodes :
15 24
chain bonds :
1-2 1-25 2-3 2-7 3-4 4-5 5-6 5-9 10-11 10-12 13-14 13-15 19-21 19-26
21-22 21-23 21-24 25-26
exact/norm bonds :
1-2 1-25 2-3 2-7 3-4 5-6 5-9 10-11 10-12 13-14 13-15 19-21 19-26 21-24

exact bonds :
4-5 21-22 21-23 25-26

G1:H,[*1],[*2]

Match level :
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:Atom 21:CLASS 22:CLASS
23:CLASS 24:CLASS 25:CLASS 26:CLASS
Generic attributes :
1:
Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic
19:
Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

Element Count :
Node 1: Limited
N,N1
O,O0
S,S0

Node 19: Limited
N,N0-1
O,O0
S,S0

11/291216

L7 STRUCTURE UPLOADED

=> s l7
SAMPLE SEARCH INITIATED 00:09:49 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 6522 TO ITERATE

30.7% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 125598 TO 135282
PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

=> s l7 sss full
FULL SEARCH INITIATED 00:09:58 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 132491 TO ITERATE

100.0% PROCESSED 132491 ITERATIONS 17 ANSWERS
SEARCH TIME: 00.00.06

L9 17 SEA SSS FUL L7

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 178.38 178.59

FILE 'CAPLUS' ENTERED AT 00:10:11 ON 26 DEC 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 26 Dec 2006 VOL 146 ISS 1
FILE LAST UPDATED: 24 Dec 2006 (20061224/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l9
L10 2 L9

=> d l10 1-2 bib abs hitstr

L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:340386 CAPLUS
DN 139:100906

TI Benzoylalanine-Derived Ketoamides Carrying Vinylbenzyl Amino Residues: Discovery of Potent Water-Soluble Calpain Inhibitors with Oral Bioavailability

AU Lubisch, Wilfried; Beckenbach, Edith; Bopp, Sabina; Hofmann, Hans-Peter; Kartal, Arzu; Kaestel, Claudia; Lindner, Tanja; Metz-Garrecht, Marion; Reeb, Jutta; Regner, Ferdinand; Vierling, Michael; Moeller, Achim

CS Neuroscience Discovery Research, Abbott GmbH & Co. KG, Ludwigshafen, D-67008, Germany

SO Journal of Medicinal Chemistry (2003), 46(12), 2404-2412
CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 139:100906

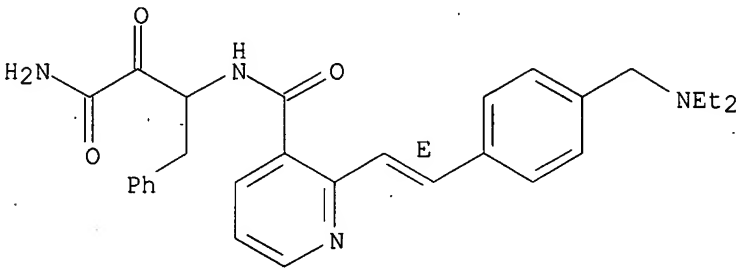
AB Novel benzoylalanine-derived ketoamides were prepared and evaluated for calpain I inhibition. Derivs. carrying vinylbenzyl amino residues in the P2-P3 region inhibited calpain in nanomolar concns. and thus represent a novel class of nonpeptidic calpain inhibitors. Selected examples exhibited an improved pharmacokinetic profile including improved water-solubility and metabolic stability. In particular, these calpain inhibitors showed oral bioavailability in rats as demonstrated by N-(1-benzyl-2-carbamoyl-2-oxoethyl)-2-[E-2-(4-diethylaminomethylphenyl)ethen-1-yl]benzamide. The closely related derivative N-(1-carbamoyl-1-oxohex-1-yl)-2-[E-2-(4-dimethylaminomethylphenyl)-ethen-1-yl]benzamide (I) was evaluated for neuroprotective efficacy after exptl. traumatic brain injury in a fluid percussion model in rats. When administered after injury, I reduced the number of damaged neurons by 41%, and this result would be in line with the suggested neuroprotective efficacy of calpain inhibition.

IT 247218-50-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of N-(2-vinylbenzoyl)- and N-(2-vinyl-3-pyridinecarbonyl)-alaninamides as calpain inhibitors)

RN 247218-50-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(diethylamino)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.



●2 HCl

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:691085 CAPLUS

DN 131:310835

11/291216

TI Preparation of cysteine protease inhibitors for therapeutic use
IN Lubisch, Wilfried; Moller, Achim; Treiber, Hans-Jorg; Knopp, Monika
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9954310	A2	19991028	WO 1999-EP2633	19990420
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	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2328396	A1	19991028	CA 1999-2328396	19990420
	AU 9939276	A	19991108	AU 1999-39276	19990420
	BR 9909774	A	20001219	BR 1999-9774	19990420
	EP 1073641	A2	20010207	EP 1999-922108	19990420
	EP 1073641	B1	20040414		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
	TR 200003068	T2	20010321	TR 2000-200003068	19990420
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	JP 2002512231	T	20020423	JP 2000-544649	19990420
	AT 264310	T	20040415	AT 1999-922108	19990420
	ES 2220061	T3	20041201	ES 1999-922108	19990420
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	HR 2000000787	A1	20010831	HR 2000-787	20001117
	ZA 2000006719	A	20020815	ZA 2000-6719	20001117
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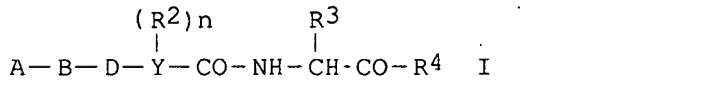
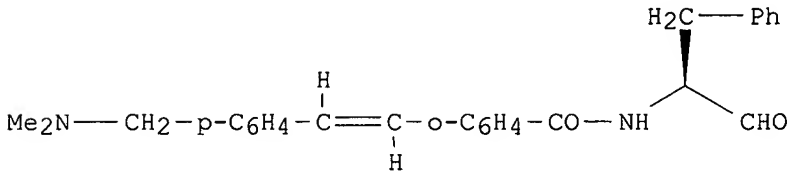
PRAI	DE 1998-19818615	A	19980420		
	WO 1999-EP2633	W	19990420		
	US 2000-673089	A3	20001011		

OS MARPAT 131:310835
GI



I



II

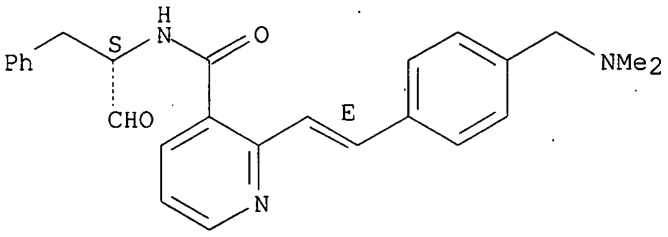
AB The invention relates to cysteine protease inhibitors of the general formula [(I); A = -(CH2)p-R1; R1 = pyrrolidine, morpholine, piperidine, -NR5R6, (N-substituted)piperazine; R5, R6 = independently H, alkyl, cyclohexyl, cyclopentyl, (CH2)nPh, where Ph may be R6-substituted; p = 1-2; B = (substituted) Ph, pyridyl, pyrimidyl or pyridazyl; D = bond, -(CH2)m-, -CH:CH-, -C.tplbond.C-; R2 = Cl, Br, F, alkyl, NHCO alkyl, NHSO2 alkyl, NO2, -O-alkyl or NH2; R3 = alkyl which can carry a (substituted) Ph

ring, indolyl ring or cyclohexyl ring; Y = Ph, pyridine, pyrimidine or pyrazine; R4 = H, COOR9 or CO-Z, where Z = NR10R11; R9,R10,R11 = (independently) H, (unsubstituted) (unbranched) alkyl; n = 0-2 and m = 0-4]. Thus, Et 2-bromo-benzoate and dimethyl(4-vinylbenzyl)amine were reacted, de-esterified, and the free acid intermediate reacted with (S)-phenylalaninol to give an intermediate which was reduced to give aldehyde (II) in 88% yield. Title compds. showed good results as inhibitors of calpain I and II or cathepsin B in a variety of in vivo and in vitro tests (no data given).

IT 247218-29-7P 247218-39-9P 247218-43-5P
247218-44-6P 247218-45-7P 247218-46-8P
247218-47-9P 247218-48-0P 247218-49-1P
247218-50-4P 247218-51-5P 247218-69-5P
247219-00-7P 247219-02-9P 247219-05-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of as cysteine protease inhibitors for therapeutic use)

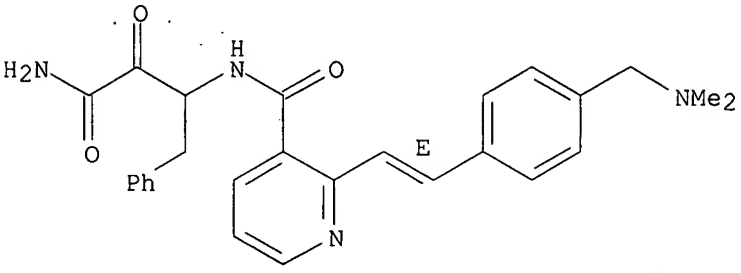
RN 247218-29-7 CAPLUS
CN 3-Pyridinecarboxamide, 2-[(1E)-2-[4-[(dimethylamino)methyl]phenyl]ethenyl]-N-[(1S)-1-formyl-2-phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



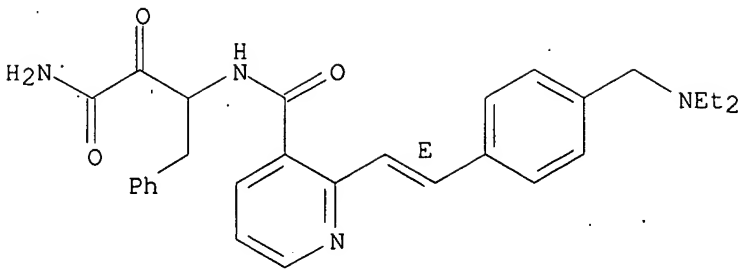
RN 247218-39-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(dimethylamino)methyl]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



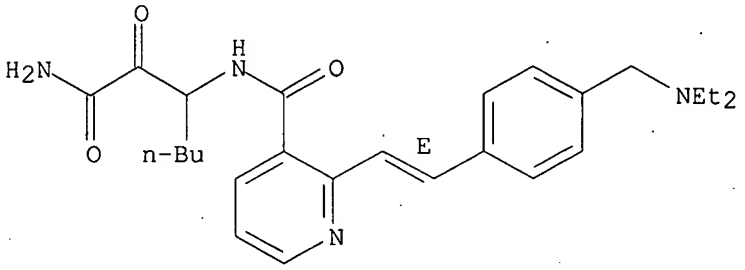
RN 247218-43-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(diethylamino)methyl]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



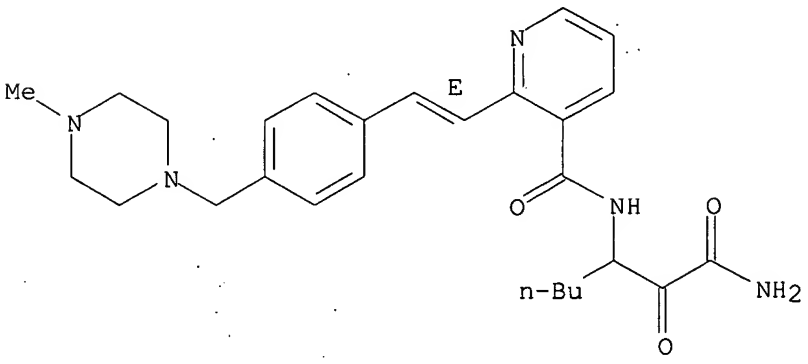
RN 247218-44-6 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[(1E)-2-[4-[(diethylamino)methyl]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



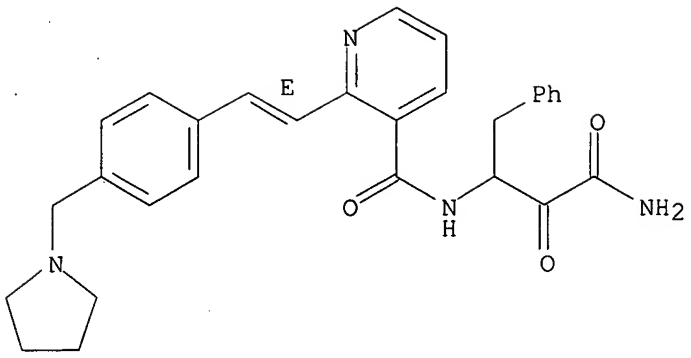
RN 247218-45-7 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[(1E)-2-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



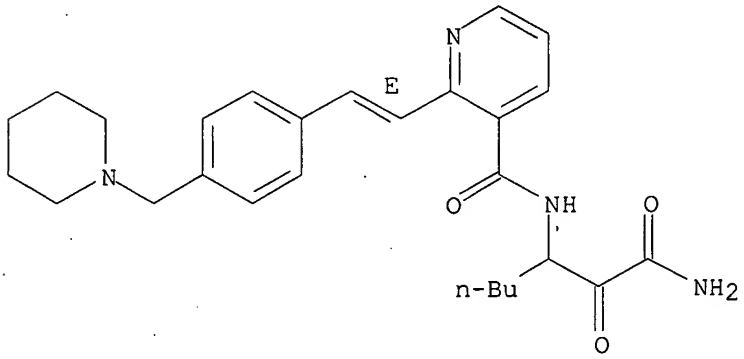
RN 247218-46-8 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-(1-pyrrolidinylmethyl)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



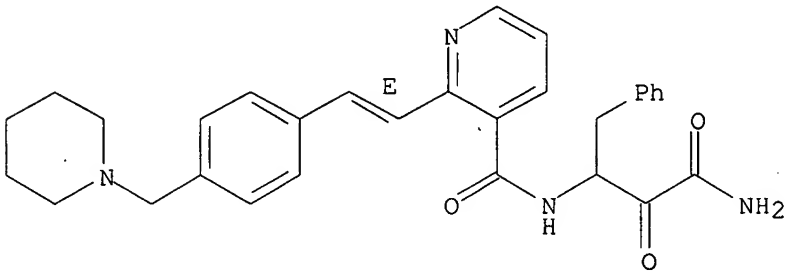
RN 247218-47-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[(1E)-2-[4-(1-piperidinylmethyl)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



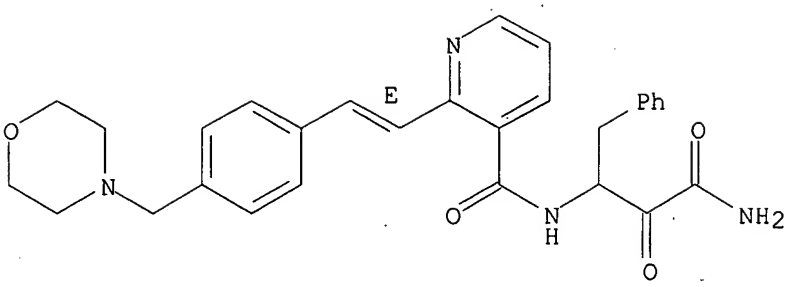
RN 247218-48-0 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-(1-piperidinylmethyl)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



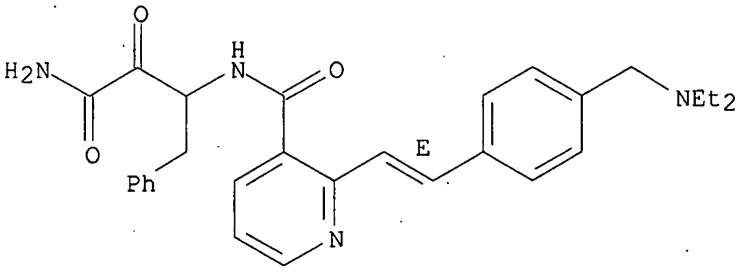
RN 247218-49-1 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-(4-morpholinylmethyl)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 247218-50-4 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(diethylamino)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

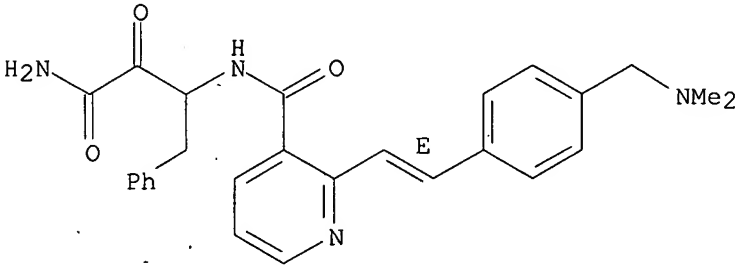
Double bond geometry as shown.



●2 HCl

RN 247218-51-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(dimethylamino)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

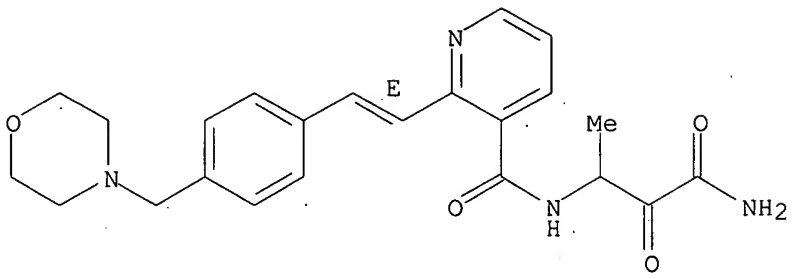
Double bond geometry as shown.



●2 HCl

RN 247218-69-5 CAPLUS
CN 3-Pyridinecarboxamide, N-(3-amino-1-methyl-2,3-dioxopropyl)-2-[(1E)-2-[4-(4-morpholinylmethyl)phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

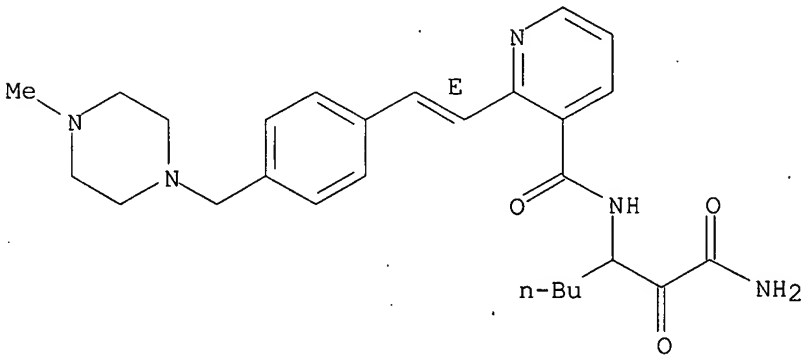
Double bond geometry as shown.



●2 HCl

RN 247219-00-7 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[(1E)-2-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

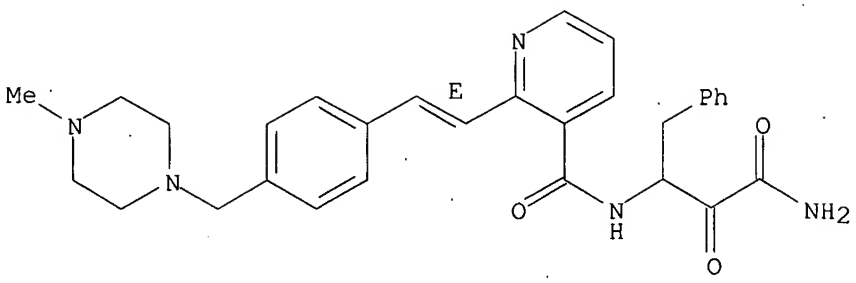
Double bond geometry as shown.



●2 HCl

RN 247219-02-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

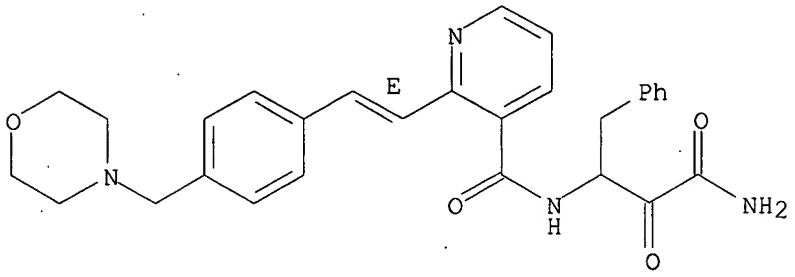
Double bond geometry as shown.



● 2 HCl

RN 247219-05-2 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-(4-morpholinylmethyl)phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● 2 HCl

=> log h

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	10.68	189.27
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.50	-1.50

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 00:10:48 ON 26 DEC 2006

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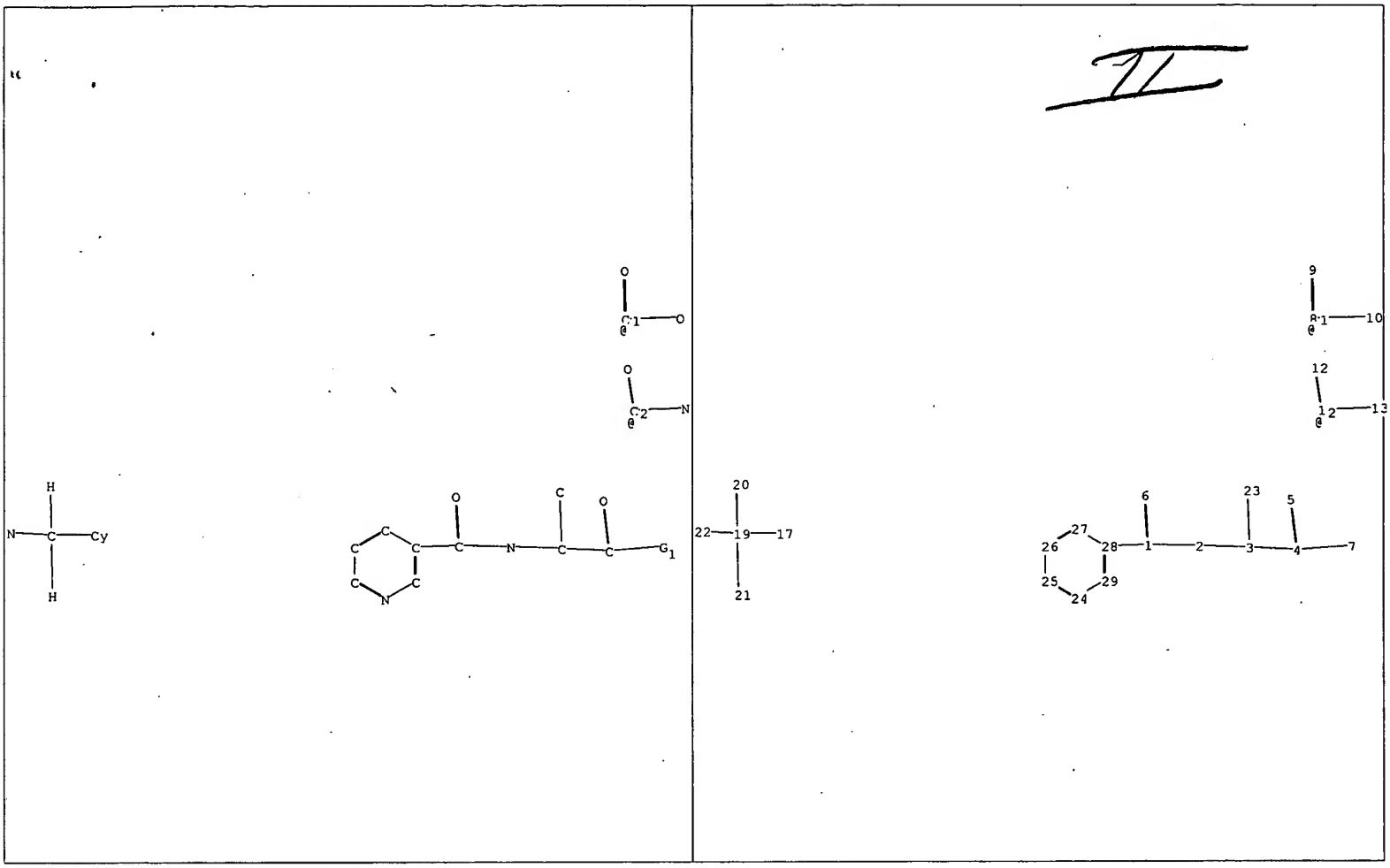

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ring nodes :
24 25 26 27 28 29
ring/chain nodes :
13 22
chain bonds :
1-6 1-2 1-28 2-3 3-4 3-23 4-5 4-7 8-9 8-10 11-12 11-13 17-19 19-20 19-21
19-22
ring bonds :
24-25 24-29 25-26 26-27 27-28 28-29
exact/norm bonds :
1-6 1-2 2-3 4-5 4-7 8-9 8-10 11-12 11-13 17-19 19-22
exact bonds :
1-28 3-4 3-23 19-20 19-21
normalized bonds :
24-25 24-29 25-26 26-27 27-28 28-29
isolated ring systems :
containing 24 :

G1:H,[*1],[*2]

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 17:Atom 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS
24:Atom 25:CLASS 26:Atom 27:Atom 28:Atom 29:Atom
Generic attributes :

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    17:
    Saturation              : Unsaturated
    Number of Carbon Atoms  : less than 7

Element Count :
    Node 17: Limited
        N,N0-1
        O,O0
        S,S0
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FULL SEARCH INITIATED 23:48:56 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 11521 TO ITERATE

100.0% PROCESSED 11521 ITERATIONS 50 ANSWERS
SEARCH TIME: 00.00.01

L5 50 SEA SSS FUL L3

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 172.10 172.76

FILE 'CAPLUS' ENTERED AT 23:49:02 ON 07 JAN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 7 Jan 2007 VOL 146 ISS 3
FILE LAST UPDATED: 5 Jan 2007 (20070105/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l5
L6 3 L5

=> d l6 1-3 bib abs hitstr

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:340386 CAPLUS
DN 139:100906
TI Benzoylalanine-Derived Ketoamides Carrying Vinylbenzyl Amino Residues: Discovery of Potent Water-Soluble Calpain Inhibitors with Oral Bioavailability
AU Lubisch, Wilfried; Beckenbach, Edith; Bopp, Sabina; Hofmann, Hans-Peter; Kartal, Arzu; Kaestel, Claudia; Lindner, Tanja; Metz-Garrecht, Marion; Reeb, Jutta; Regner, Ferdinand; Vierling, Michael; Moeller, Achim
CS Neuroscience Discovery Research, Abbott GmbH & Co. KG, Ludwigshafen, D-67008, Germany
SO Journal of Medicinal Chemistry (2003), 46(12), 2404-2412
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
OS CASREACT 139:100906
AB Novel benzoylalanine-derived ketoamides were prepared and evaluated for calpain I inhibition. Derivs. carrying vinylbenzyl amino residues in the

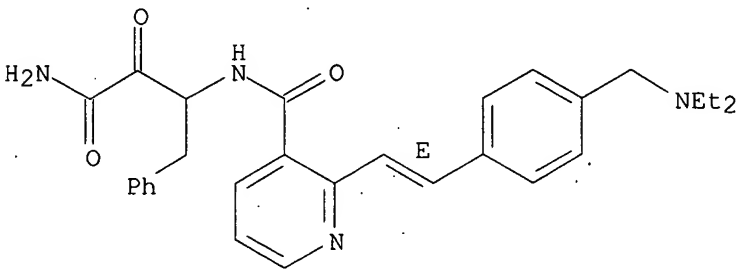
P2-P3 region inhibited calpain in nanomolar concns. and thus represent a novel class of nonpeptidic calpain inhibitors. Selected examples exhibited an improved pharmacokinetic profile including improved water-solubility and metabolic stability. In particular, these calpain inhibitors showed oral bioavailability in rats as demonstrated by N-(1-benzyl-2-carbamoyl-2-oxoethyl)-2-[E-2-(4-diethylaminomethylphenyl)ethen-1-yl]benzamide. The closely related derivative N-(1-carbamoyl-1-oxohex-1-yl)-2-[E-2-(4-dimethylaminomethylphenyl)-ethen-1-yl]benzamide (I) was evaluated for neuroprotective efficacy after exptl. traumatic brain injury in a fluid percussion model in rats. When administered after injury, I reduced the number of damaged neurons by 41%, and this result would be in line with the suggested neuroprotective efficacy of calpain inhibition.

IT 247218-50-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of N-(2-vinylbenzoyl)- and N-(2-vinyl-3-pyridinecarbonyl)-alaninamides as calpain inhibitors)

RN 247218-50-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(diethylamino)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.



●2 HCl

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:691085 CAPLUS
DN 131:310835
TI Preparation of cysteine protease inhibitors for therapeutic use
IN Lubisch, Wilfried; Moller, Achim; Treiber, Hans-Jorg; Knopp, Monika
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9954310	A2	19991028	WO 1999-EP2633	19990420
	WO 9954310	A3	20000217		

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RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

	PT, SE				
	CA 2328396	A1	19991028	CA 1999-2328396	19990420
	AU 9939276	A	19991108	AU 1999-39276	19990420
	BR 9909774	A	20001219	BR 1999-9774	19990420
	EP 1073641	A2	20010207	EP 1999-922108	19990420
	EP 1073641	B1	20040414		
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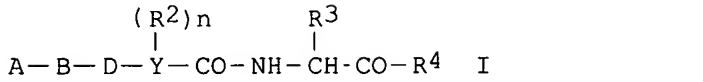
	HU 200102732	A2	20011228	HU 2001-2732	19990420
	JP 2002512231	T	20020423	JP 2000-544649	19990420
	AT 264310	T	20040415	AT 1999-922108	19990420
	ES 2220061	T3	20041201	ES 1999-922108	19990420
	US 6753327	B1	20040622	US 2000-673089	20001011
	BG 104873	A	20010731	BG 2000-104873	20001017
	NO 2000005263	A	20001019	NO 2000-5263	20001019
	HR 2000000787	A1	20010831	HR 2000-787	20001117
	ZA 2000006719	A	20020815	ZA 2000-6719	20001117
	US 2004082569	A1	20040429	US 2003-690400	20031020
PRAI	DE 1998-19818615	A	19980420		
	WO 1999-EP2633	W	19990420		
	US 2000-673089	A3	20001011		
OS	MARPAT 131:310835				
GI					



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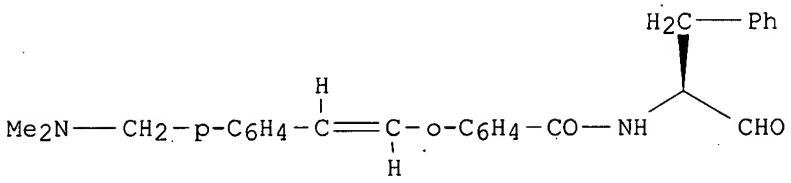


II

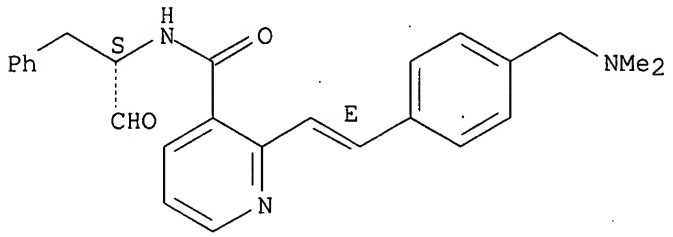
AB The invention relates to cysteine protease inhibitors of the general formula [(I); A = -(CH2)p-R1; R1 = pyrrolidine, morpholine, piperidine, -NR5R6, (N-substituted)piperazine; R5, R6 = independently H, alkyl, cyclohexyl, cyclopentyl, (CH2)nPh, where Ph may be R6-substituted; p = 1-2; B = (substituted) Ph, pyridyl, pyrimidyl or pyridazyl; D = bond, -(CH2)m-, -CH:CH-, -C.tplbond.C-; R2 = Cl, Br, F, alkyl, NHCO alkyl, NHSO2 alkyl, NO2, -O-alkyl or NH2; R3 = alkyl which can carry a (substituted) Ph ring, indolyl ring or cyclohexyl ring; Y = Ph, pyridine, pyrimidine or pyrazine; R4 = H, COOR9 or CO-Z, where Z = NR10R11; R9,R10,R11 = (independently) H, (unsubstituted) (unbranched) alkyl; n = 0-2 and m = 0-4]. Thus, Et 2-bromo-benzoate and dimethyl(4-vinylbenzyl)amine were reacted, de-esterified, and the free acid intermediate reacted with (S)-phenylalaninol to give an intermediate which was reduced to give aldehyde (II) in 88% yield. Title compds. showed good results as inhibitors of calpain I and II or cathepsin B in a variety of in vivo and in vitro tests (no data given).

IT 247218-29-7P 247218-39-9P 247218-43-5P
247218-44-6P 247218-45-7P 247218-46-8P
247218-47-9P 247218-48-0P 247218-49-1P
247218-50-4P 247218-51-5P 247218-69-5P
247219-00-7P 247219-02-9P 247219-05-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of as cysteine protease inhibitors for therapeutic use)

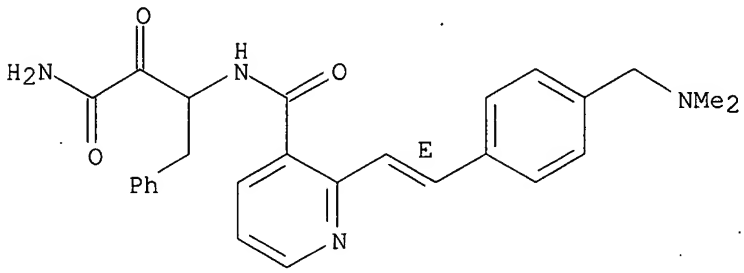
RN 247218-29-7 CAPLUS
CN 3-Pyridinecarboxamide, 2-[(1E)-2-[4-[(dimethylamino)methyl]phenyl]ethenyl]-N-[(1S)-1-formyl-2-phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



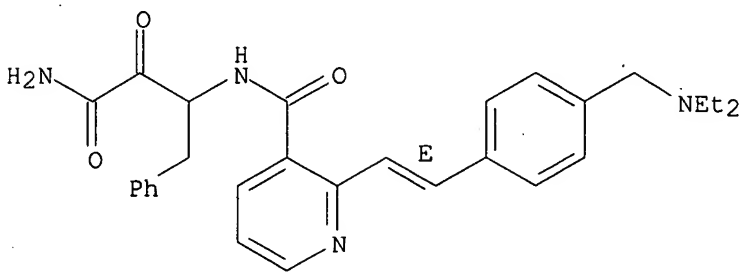
RN 247218-39-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(dimethylamino)methyl]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



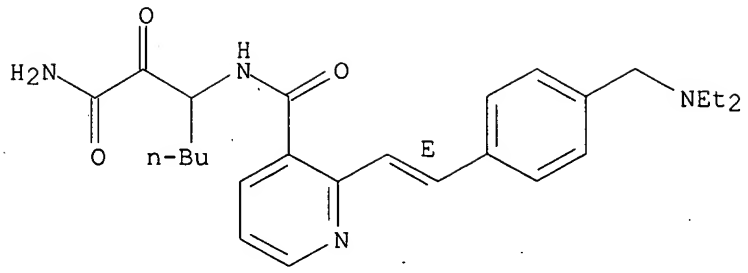
RN 247218-43-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(diethylamino)methyl]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



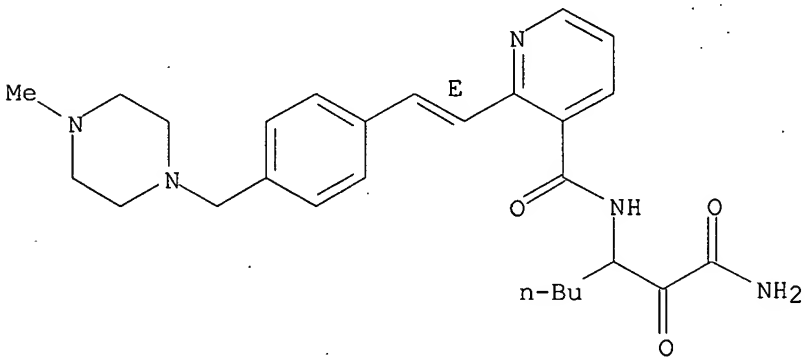
RN 247218-44-6 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[(1E)-2-[4-[(diethylamino)methyl]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



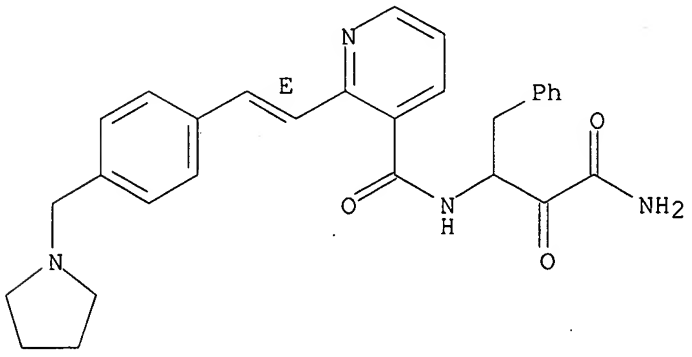
RN 247218-45-7 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[(1E)-2-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



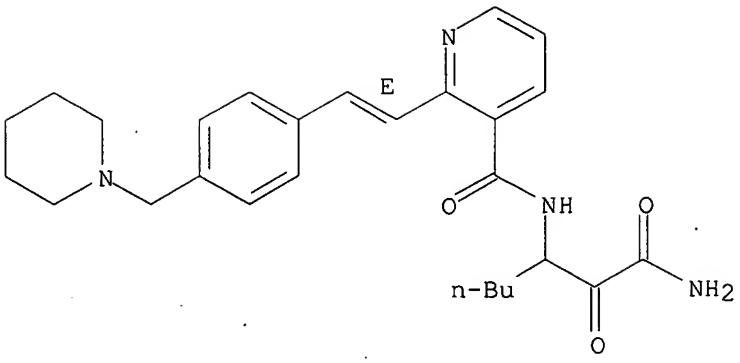
RN 247218-46-8 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-(1-pyrrolidinylmethyl)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



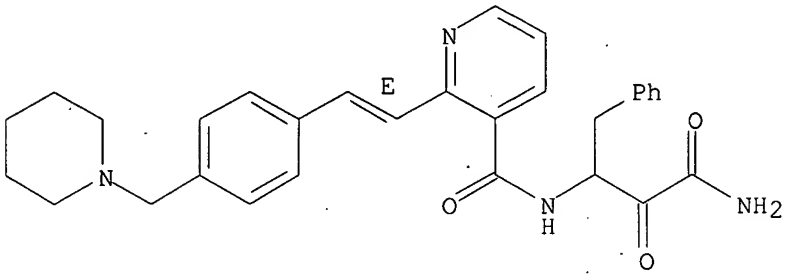
RN 247218-47-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[(1E)-2-[4-(1-piperidinylmethyl)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



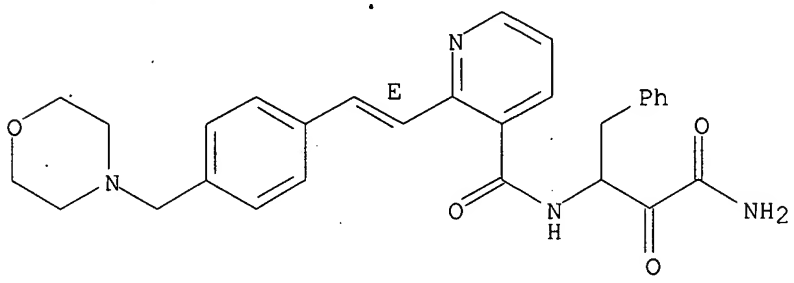
RN 247218-48-0 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-(1-piperidinylmethyl)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



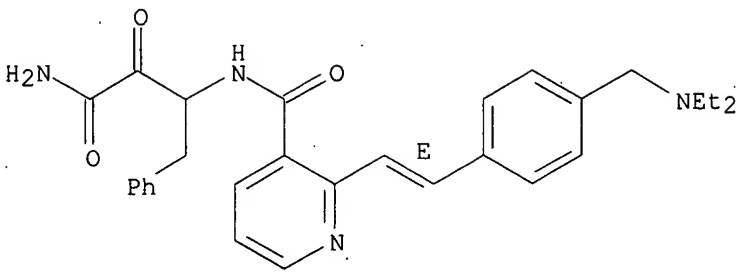
RN 247218-49-1 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-(4-morpholinylmethyl)phenyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 247218-50-4 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(diethylamino)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

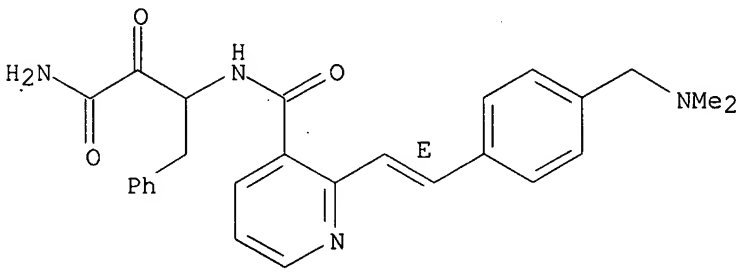
Double bond geometry as shown.



●2 HCl

RN 247218-51-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(dimethylamino)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

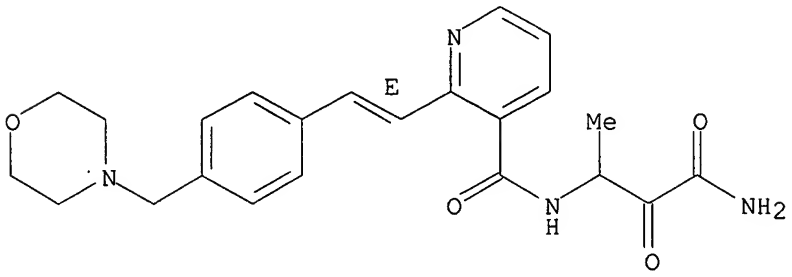
Double bond geometry as shown.



●2 HCl

RN 247218-69-5 CAPLUS
CN 3-Pyridinecarboxamide, N-(3-amino-1-methyl-2,3-dioxopropyl)-2-[(1E)-2-[4-(4-morpholinylmethyl)phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

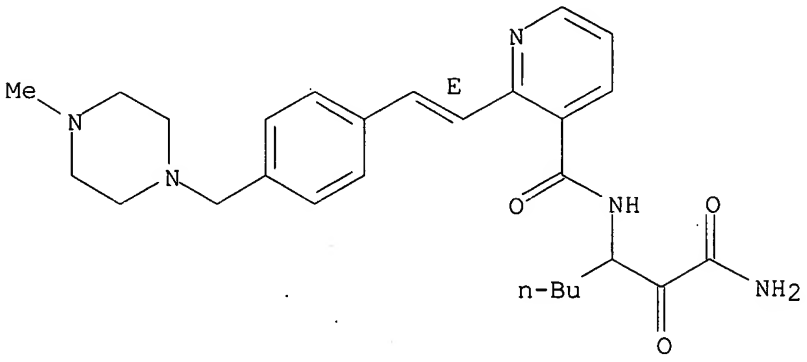
Double bond geometry as shown.



●2 HCl

RN 247219-00-7 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[(1E)-2-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

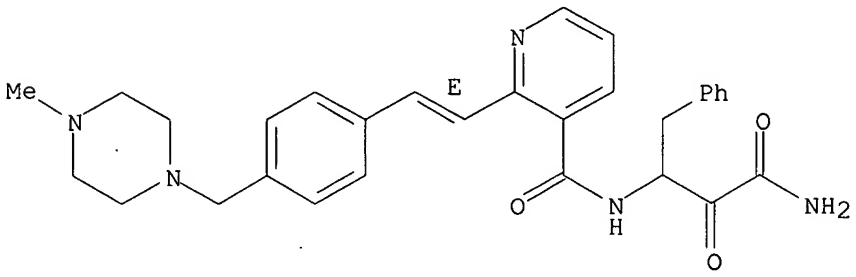
Double bond geometry as shown.



●2 HCl

RN 247219-02-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

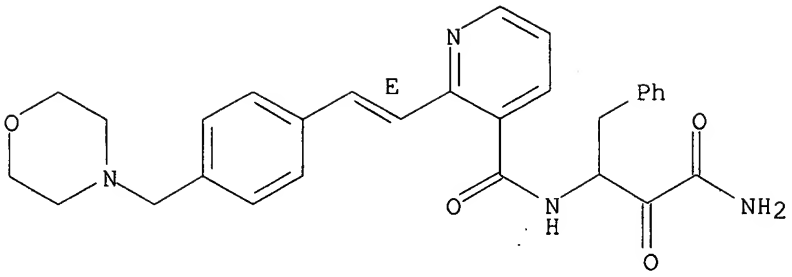
Double bond geometry as shown.



●2 HCl

RN 247219-05-2 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[(1E)-2-[4-(4-morpholinylmethyl)phenyl]ethenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.



●2 HCl

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:691081 CAPLUS
DN 131:299460
TI Preparation of piperazinylnicotinamides and related compounds as calpain and cathepsin inhibitors.
IN Lubisch, Wilfried; Moller, Achim; Treiber, Hans-Jorg; Knopp, Monika
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

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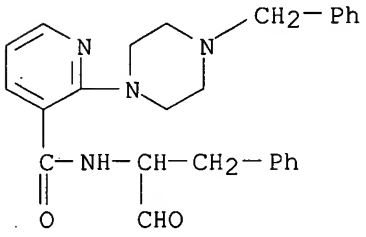
	EP 1082308	A1	20010314	EP 1999-920710	19990420
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
	HU 200101599	A2	20010928	HU 2001-1599	19990420
	JP 2002512229	T	20020423	JP 2000-544646	19990420
	US 6562827	B1	20030513	US 2000-647681	20001003
	NO 2000005237	A	20001018	NO 2000-5237	20001018
	HR 2000000764	A1	20010630	HR 2000-764	20001110
	BG 104961	A	20010531	BG 2000-104961	20001117
	ZA 2000006712	A	20020923	ZA 2000-6712	20001117
PRAI	DE 1998-19817462	A	19980420		
	WO 1999-EP2632	W	19990420		

OS MARPAT 131:299460
AB A(CH2)xR1R2BCONHCHR3COR4 [A = (substituted) piperazinyl, homopiperazinyl, hexahydroazepinyl, piperidinyl, pyrrolidinyl; B = Ph, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl; R1, R2 = H, alkyl, alkoxy, OH, Cl, F, Br, iodo, CF3, NO2, NH2, cyano, CO2H, alkoxycarbonyl, alkylcarbonylamino, etc.; R3 = alkyl, methylthioalkyl, cyclohexylalkyl, cyclopentylalkyl, cycloheptylalkyl, phenylalkyl, pyridylalkyl, pyrimidinylalkyl, pyridazinylalkyl, indolylalkyl, etc.; R4 = H, COR8; R8 = OR9, NR9R10; R9 = H, alkyl; R10 = H, (substituted) alkyl], were prepared for treatment of

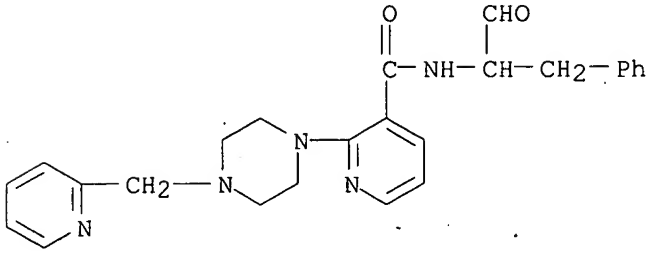
neurodegenerative disease (no data). Thus, Me chloronicotinate, 4-pyridylpiperazine, and 18-crown-6 were heated at 100° in DMF to give 82% Me 2-[4-(pyrid-4-yl)piperazin-1-yl]nicotinate. The latter was saponified with LiOH in THF/H2O and the acid was stirred with Et3N and Na2SO4 in CH2Cl2/DMF; phenylalanino, HOBT, and EDC were added at 0° followed by stirring overnight at room temperature to give 2-[4-(pyrid-4-yl)piperazin-1-yl]nicotinic acid-N-(3-phenylpropan-1-ol-2-yl)amide. This was stirred with SO3.pyridine and Et3N in Me2SO to give 2-[4-(pyrid-4-yl)piperazin-1-yl]nicotinic acid-N-(3-phenylpropan-1-al-2-yl)amide.

IT 247116-90-1P 247116-91-2P 247116-92-3P
247116-93-4P 247116-94-5P 247116-95-6P
247116-96-7P 247116-98-9P 247117-01-7P
247117-02-8P 247117-04-0P 247117-05-1P
247117-06-2P 247117-07-3P 247117-10-8P
247117-11-9P 247117-12-0P 247117-13-1P
247117-14-2P 247117-15-3P 247117-17-5P
247117-19-7P 247117-20-0P 247117-21-1P
247117-22-2P 247117-24-4P 247117-28-8P
247117-30-2P 247117-33-5P 247117-34-6P
247117-35-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperazinylnicotinamides and related compds. as calpain and cathepsin inhibitors)

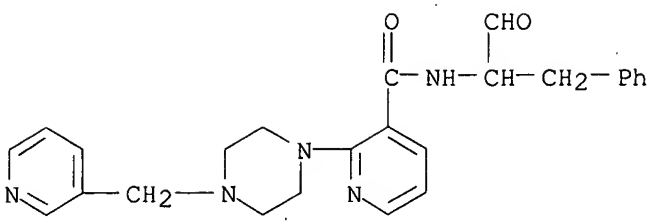
RN 247116-90-1 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



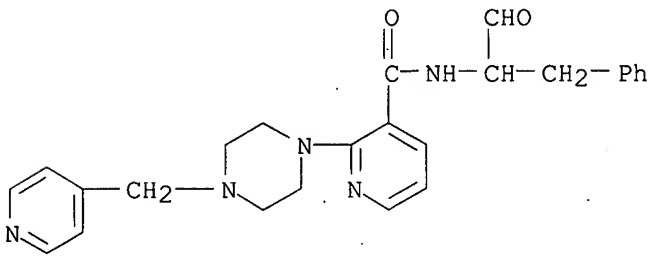
RN 247116-91-2 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-(2-pyridinylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



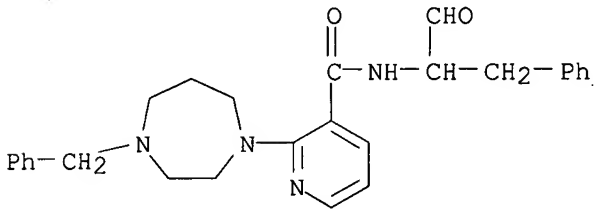
RN 247116-92-3 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-(3-pyridinylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



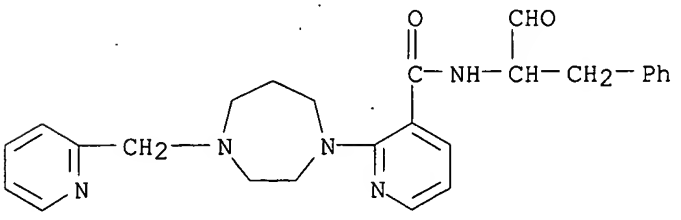
RN 247116-93-4 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-(4-pyridinylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



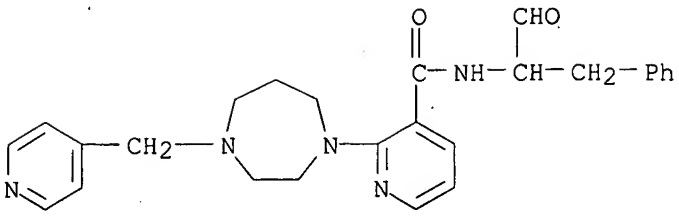
RN 247116-94-5 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[hexahydro-4-(phenylmethyl)-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



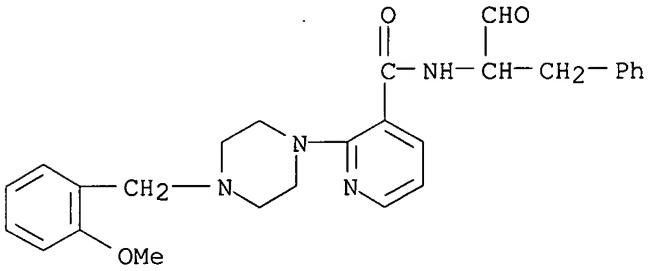
RN 247116-95-6 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[hexahydro-4-(2-pyridinylmethyl)-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



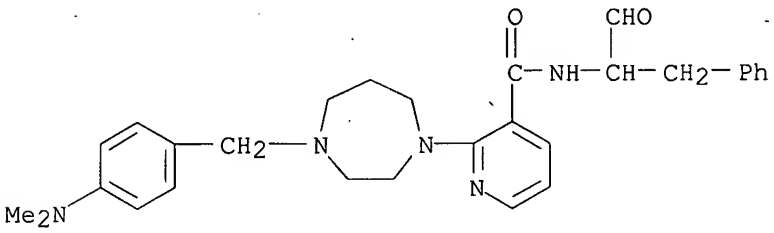
RN 247116-96-7 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[hexahydro-4-(4-pyridinylmethyl)-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



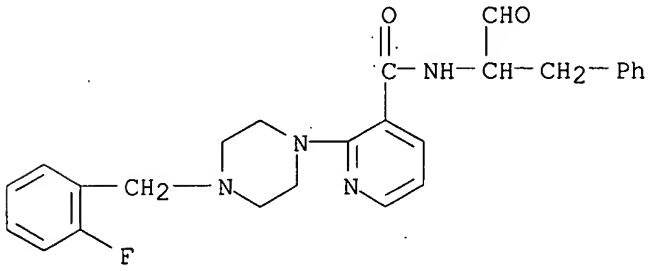
RN 247116-98-9 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-[(2-methoxyphenyl)methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 247117-01-7 CAPLUS
CN 3-Pyridinecarboxamide, 2-[4-[[4-(dimethylamino)phenyl]methyl]hexahydro-1H-1,4-diazepin-1-yl]-N-(1-formyl-2-phenylethyl)- (9CI) (CA INDEX NAME)

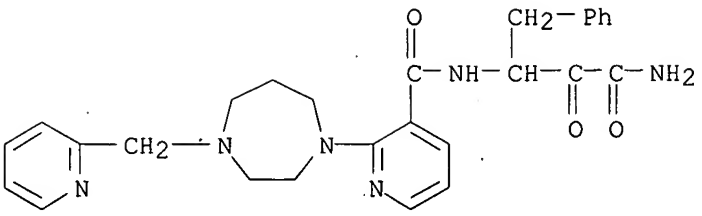


RN 247117-02-8 CAPLUS
CN 3-Pyridinecarboxamide, 2-[4-[(2-fluorophenyl)methyl]-1-piperazinyl]-N-(1-formyl-2-phenylethyl)- (9CI) (CA INDEX NAME)

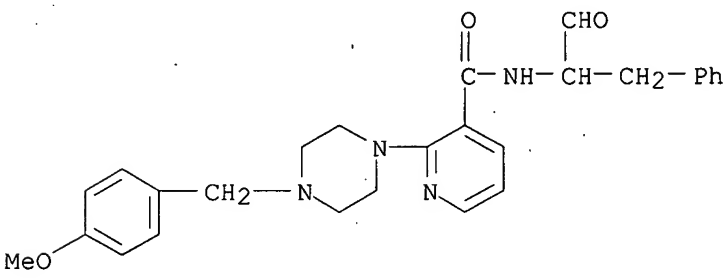


RN 247117-04-0 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[hexahydro-4-(2-pyridinylmethyl)-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX

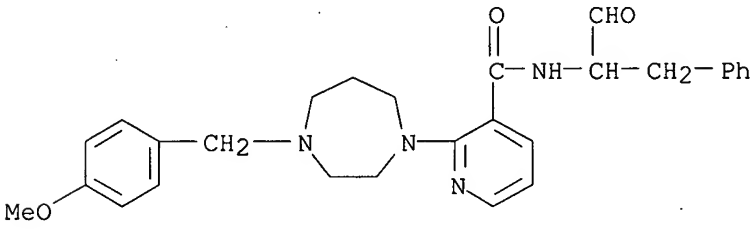
NAME)



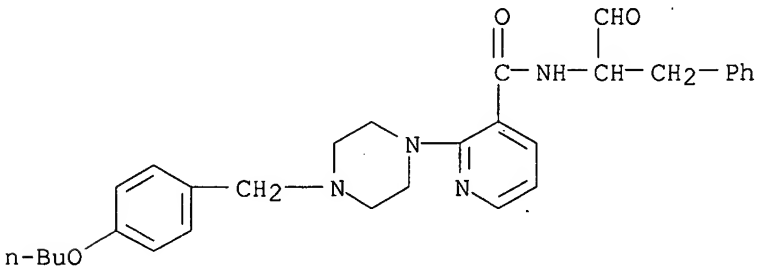
RN 247117-05-1 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-[(4-methoxyphenyl)methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 247117-06-2 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[hexahydro-4-[(4-methoxyphenyl)methyl]-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)

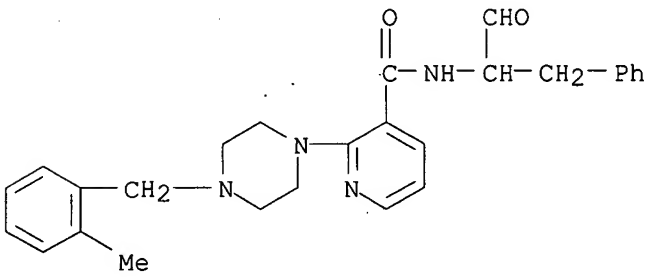


RN 247117-07-3 CAPLUS
CN 3-Pyridinecarboxamide, 2-[4-[(4-butoxyphenyl)methyl]-1-piperazinyl]-N-(1-formyl-2-phenylethyl)- (9CI) (CA INDEX NAME)

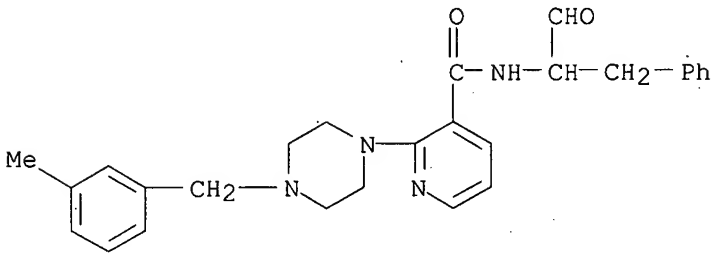


RN 247117-10-8 CAPLUS

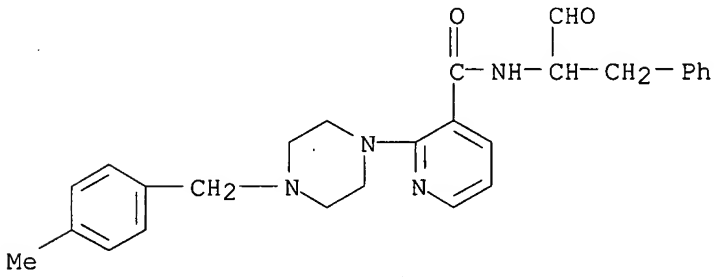
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-[(2-methylphenyl)methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



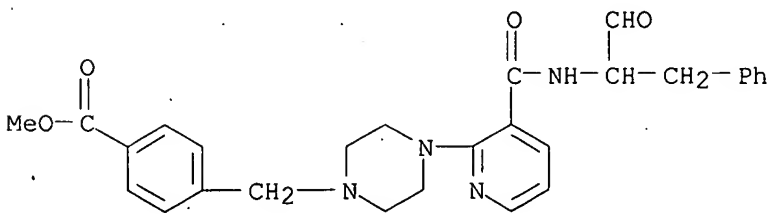
RN 247117-11-9 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-[(3-methylphenyl)methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



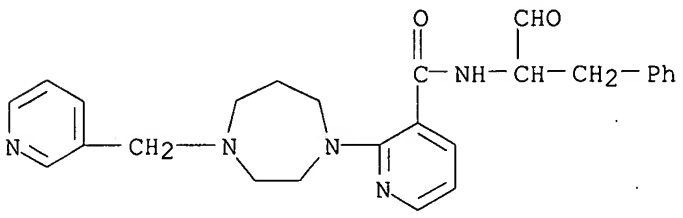
RN 247117-12-0 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[4-[(4-methylphenyl)methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



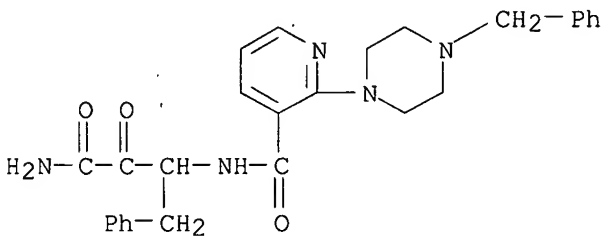
RN 247117-13-1 CAPLUS
CN Benzoic acid, 4-[[4-[3-[[(1-formyl-2-phenylethyl)amino]carbonyl]-2-pyridinyl]-1-piperazinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 247117-14-2 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formyl-2-phenylethyl)-2-[hexahydro-4-(3-pyridinylmethyl)-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)

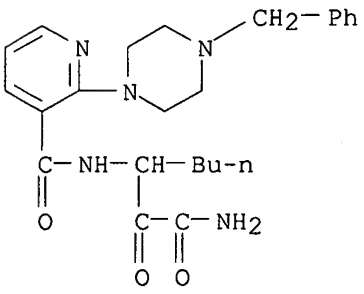


RN 247117-15-3 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-2-[4-(phenylmethyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

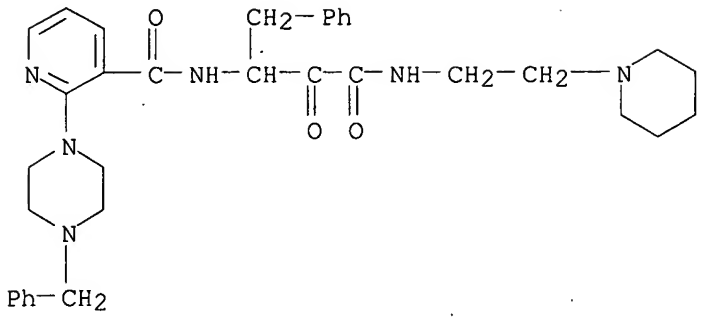


● 2 HCl

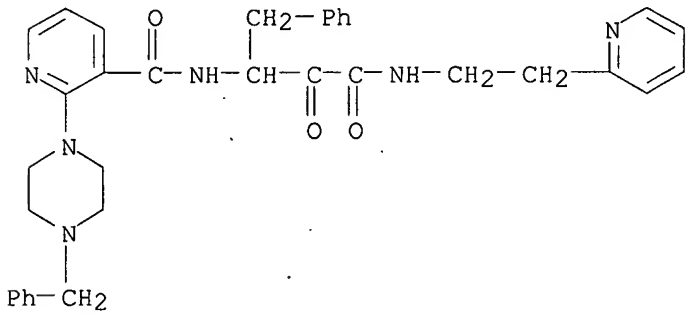
RN 247117-17-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-(aminooxoacetyl)pentyl]-2-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



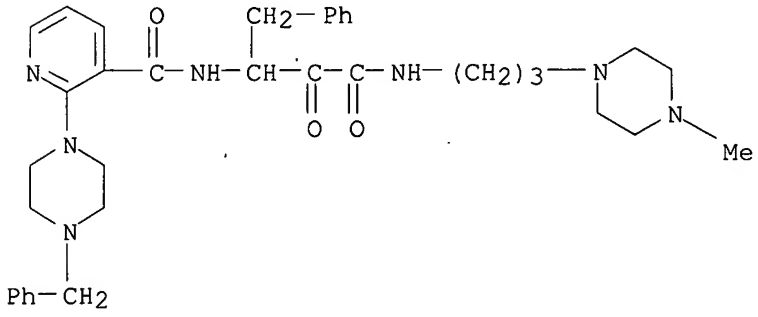
RN 247117-19-7 CAPLUS
CN 3-Pyridinecarboxamide, N-[2,3-dioxo-1-(phenylmethyl)-3-[[2-(1-piperidinyl)ethyl]amino]propyl]-2-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



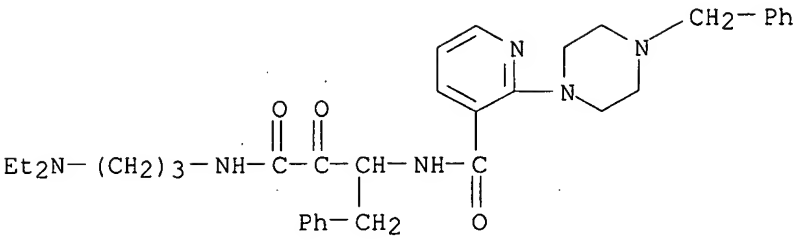
RN 247117-20-0 CAPLUS
CN 3-Pyridinecarboxamide, N-[2,3-dioxo-1-(phenylmethyl)-3-[[2-(2-pyridinyl)ethyl]amino]propyl]-2-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 247117-21-1 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-[[3-(4-methyl-1-piperazinyl)propyl]amino]-2,3-dioxo-1-(phenylmethyl)propyl]-2-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



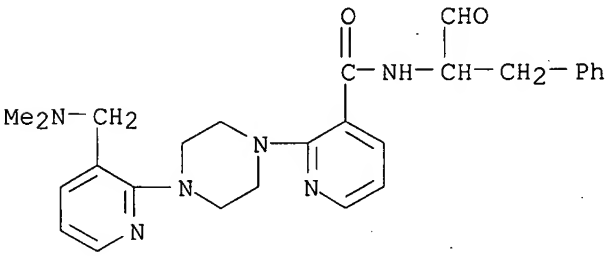
RN 247117-22-2 CAPLUS
CN 3-Pyridinecarboxamide, N-[3-[[3-(diethylamino)propyl]amino]-2,3-dioxo-1-(phenylmethyl)propyl]-2-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 247117-24-4 CAPLUS
CN 3-Pyridinecarboxamide, 2-[4-[3-[(dimethylamino)methyl]-2-pyridinyl]-1-piperazinyl]-N-(1-formyl-2-phenylethyl)-, (2E)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

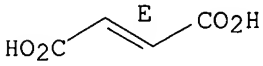
CRN 247117-23-3
CMF C27 H32 N6 O2



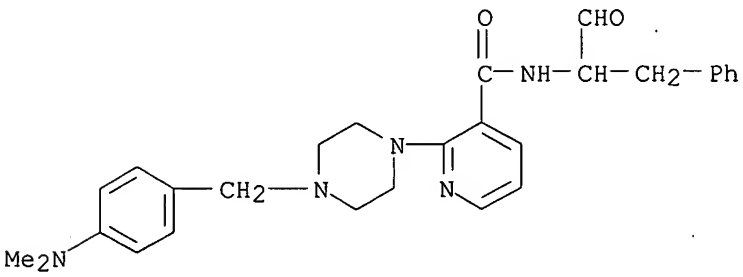
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.

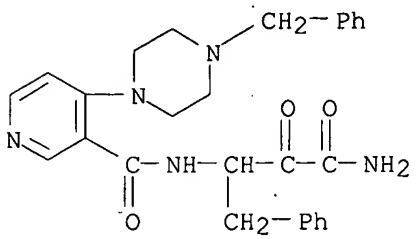


RN 247117-28-8 CAPLUS
CN 3-Pyridinecarboxamide, 2-[4-[[4-(dimethylamino)phenyl]methyl]-1-piperazinyl]-N-(1-formyl-2-phenylethyl)- (9CI) (CA INDEX NAME)

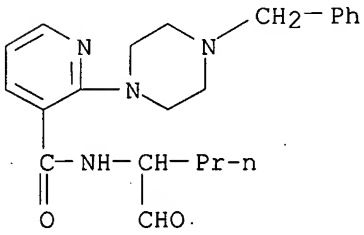


RN 247117-30-2 CAPLUS

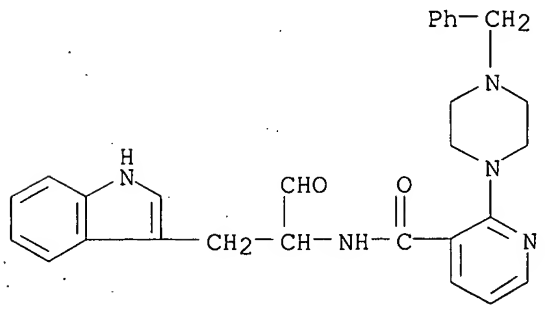
CN 3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-4-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



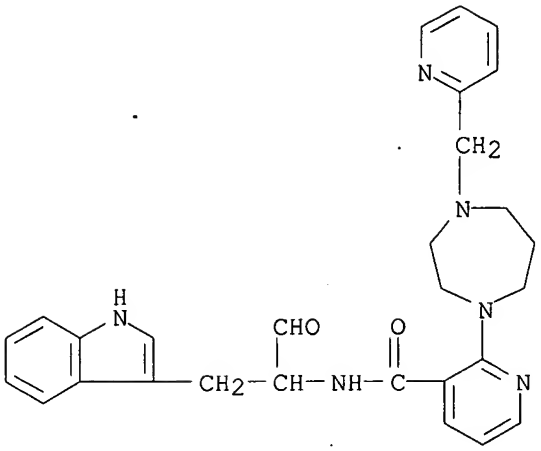
RN 247117-33-5 CAPLUS
CN 3-Pyridinecarboxamide, N-(1-formylbutyl)-2-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 247117-34-6 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-formyl-2-(1H-indol-3-yl)ethyl]-2-[4-(phenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 247117-35-7 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-formyl-2-(1H-indol-3-yl)ethyl]-2-[hexahydro-4-(2-pyridinylmethyl)-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FULL ESTIMATED COST	16.28	189.04

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.34	-2.34

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.45	189.49

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION

11/291216

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